PART 70 OPERATING PERMIT

OFFICE OF AIR QUALITY
and
VIGO COUNTY AIR POLLUTION CONTROL

Companhia Siderugica Nacional, LLC
(CSN, LLC)
455 West Industrial Drive
Terre Haute, Indiana 47802

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T167-12516-00120	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 24, 2003 Expiration Date: June 24, 2008

TABLE OF CONTENTS

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]
C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports
C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection
C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - Galvanizing Line

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.1.1 Particulate Matter (PM) [326 IAC 6-1-2]
D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
D.1.4 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.1.5 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.1.6 Record Keeping Requirements

D.2 FACILITY OPERATION CONDITIONS - Three (3) Package Boilers

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.2.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR 60, Subpart A]
D.2.2 Particulate Matter (PM) [326 IAC 6-1-2(b)]
D.2.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.2.5 NSPS Record Keeping Requirements [40 CFR 60.48c, Subpart Dc]
D.2.6 NSPS Fuel Use Recordkeeping [40 CFR 60.48c, Subpart Dc]

D.3 FACILITY OPERATION CONDITIONS - Hydrochloric Acid Pickle Line

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.3.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]
D.3.2 NESHAP for Steel Pickling - HCl Process Facilities [40 CFR 63.1158, Subpart CCC]
D.3.3 NESHAP for Steel Pickling - HCl Process Facilities [40 CFR 63.1158, Subpart CCC]
D.3.4 NESHAP Operational and Equipment Standards (Hydrochloric Acid Storage Vessels) [40 CFR 63.1159, Subpart CCC]
D.3.5 NESHAP Maintenance Requirments [40 CFR 63.1160, Subpart CCC]
D.3.6 NESHAP Monitoring Requirements [40 CFR 63.1162, Subpart CCC]
D.3.7 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
D.3.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.3.9 NESHAP Performance testing and test methods [40 CFR 63.1161, Subpart CCC]

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary steel processing plant.

Responsible Official:	Vice President - Operations
Source Address:	455 West Industrial Drive, Terre Haute, Indiana 47802
Mailing Address:	455 West industrial Drive, Terre Haute, Indiana 47802
General Source Phone Number:	(812) 299-4157
SIC Code:	3316
County Location:	Vigo County
Source Location Status:	Maintenance Attainment for Sulfur Dioxide (SO_2) Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories (Nested)

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

1. Galvanizing Line, identified as GAL-1, with a maximum capacity of 140,000 pounds of steel per hour consisting of the following equipment (Note: a portion of this line may be used as a continuous annealing line instead of galvanizing only):
   a) Galvanizing Line Strip Dryer Furnace, identified as GL-01, with a maximum capacity of 2.0 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to the building interior.

   b) Galvanizing Line Direct Fire Zone Furnace, identified as GL-02, with a maximum capacity of 45.3 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stack 002.

   c) Galvanizing Line Radiant Heat Tube Furnace, identified as GL-03, with a maximum capacity of 13.2 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stack 003.

   d) Galvanizing Line Chromate Spray Dryer Furnace, identified as GL-04, with a maximum capacity of 2.0 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to the building interior.

   e) Galvanizing Line Spray Cleaning section with a brush scrubber and strip rinse, identified as GL-05, utilizing hot alkali solution, using mist elimination for control, and exhausting to stack 006.

   f) Galvanizing Line Zinc Induction Melting section, identified as GL-06, with a maximum zinc melt capacity of 10,200 pounds per hour, using no control, and exhausting to the building interior.

   g) Galvanizing Line Temper Mill, identified as GL-07, utilizing a detergent as the rolling fluid, using no control, and exhausting to the building interior.

   h) Galvanizing Line Chromate Spray section, identified as GL-08, utilizing chromic acid, using no

control, and exhausting to the building interior.

2. Three (3) Package Boilers, identified as PB-1 through PB-3, with a maximum capacity of 33.48 million BTU per hour each, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stacks 005A, 005B, and 005C respectively.

3. Pickle Line, identified as PL-1, with a maximum capacity of 800,000 pounds of steel per hour, utilizing Hydrochloric Acid as the pickling liquor, consisting of the following equipment:
   a) Four (4) pickle tanks, identified as pickle tank #1 through pickle tank #4, with a maximum capacity of 5,200 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   b) One(1) five-chamber cascading re-circulating rinse tank, identified as rinse tank #1, with a maximum capacity of 3,800 gallons, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   c) Strip Dryer, identified as PL-dryer, with a maximum capacity of 5,900 scfm of air heated in the package boilers, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   d) Two (2) fresh acid storage tanks, identified as Tank #1 and Tank #2, with a maximum capacity of 24,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   e) Four (4) pickle liquor re-circulation tanks, identified as Tank #3 through Tank #6, with a maximum capacity of 12,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   f) Spent rinse water storage tank, identified as Tank #9 , with a maximum capacity of 12,000 gallons, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   g) Two (2) spent liquor storage tanks, identified as Tank #7 and #8, with a maximum capacity of 24,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   h) Electrostatic Oiler, identified as PL-oiler, with maximum capacity of 0.65 pounds of oil per ton of steel, using no control and exhausting to the building interior.

   i) Welding / Shearing operations to conduct continuous pickling.

   j) Pickle Line Scale Breaker, controlled by a Wheelabrator baghouse (Model 120 Series 6P), and exhausting to stack 007.

4. Batch Annealing system consisting of 18 bases and 9 batch annealing furnaces. The furnaces are identified as BA-01 through BA-09, with a maximum capacity of 6.0 million BTU per hour each, primarily fired on natural gas but also consuming evaporated oil from the coils being annealed and having propane backup, using low NO_x burners for control, and exhausting to the building interior.

5. Two Stand Reversing Cold Mill, identified as RCM-1, with a maximum capacity of 400,000 pounds of steel per hour, using a progressive purification filter system with stack skimming for control, and exhausting to stack 004.

6. Temper Mill, identified as TM-1, with a maximum capacity of 158,000 pounds of steel per hour, using no control and exhausting to the building interior.

7. Seven (7) space heating units, with a maximum capacity of 6.6 million BTU per hour each, fired on either natural gas or propane.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

(a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, VCAPC, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by Vigo County Air Pollution Control (VCAPC).

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall furnish to IDEM, OAQ and VCAPC, within a reasonable time, any information that IDEM, OAQ and VCAPC, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ and VCAPC, copies of

records required to be kept by this permit.

(c) For information furnished by the Permittee to IDEM, OAQ and VCAPC, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.

(c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ and VCAPC, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control

103 South 3rd Street
Terre Haute, Indiana 47807

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ and VCAPC, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ VCAPC. IDEM, OAQ and VCAPC, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Vigo County Air Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Vigo County Air Pollution Control within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and VCAPC, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ
Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

VCAPC
Telephone Number: 812-462-3433
Facsimile Number: 812-462-3447

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ and VCAPC, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ and VCAPC, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ or VCAPC, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ or VCAPC, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ or VCAPC, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or VCAPC, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ or VCAPC, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ or VCAPC, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or VCAPC, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and VCAPC, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-

1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre haute, Indiana 47807

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.

(2) If IDEM, OAQ and VCAPC, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ and VCAPC, take final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and VCAPC, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ and VCAPC, fail to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control

103 South 3rd Street
Terre Haute, Indiana 47807

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all

such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and VCAPC, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, VCAPC, and U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy any records that must be kept under the conditions of this permit;

(c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ and VCAPC, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ or VCAPC, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ and VCAPC.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ and VCAPC of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and VCAPC not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and VCAPC, if the source submits to IDEM, OAQ and VCAPC, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of any other operating parameter, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.

(d) The Permittee may request the IDEM, OAQ and VCAPC approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ and VCAPC, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ and VCAPC, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and VCAPC upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ and VCAPC shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and VCAPC, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ and VCAPC that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ and VCAPC may extend the retesting deadline.

(c) IDEM, OAQ and VCAPC reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1

and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre haute, Indiana 47807

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on or before the date it is due.

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Vigo County Air Pollution Control makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Vigo County Air Pollution Control within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and VCAPC, on

or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Part 2 MACT Application Submittal Requirement

C.21 Application Requirements for Section 112(j) of the Clean Air Act [40 CFR 63.52(e) and 326 IAC 2-7-12]

(a) The Permittee shall submit a Part 2 Maximum Achievable Control Technology (MACT) Application in accordance with 40 CFR 63.52(e)(1). The Part 2 MACT Application shall meet the requirements of 40 CFR 63.53(b).

(b) Notwithstanding paragraph (a), the Permittee is not required to submit a Part 2 MACT Application if the Permittee no longer meets the applicability criteria of 40 CFR 63.50 by the application deadline in 40 CFR 63.52(e)(1). For example, the Permittee would not have to submit a Part 2 MACT Application if, by the application deadline:

(1) The source is no longer a major source of hazardous air pollutants, as defined in 40 CFR 63.2;

(2) The source no longer includes one or more units in an affected source category for which the U.S. EPA failed to promulgate an emission standard by May 15, 2002; or

(3) The MACT standard or standards for the affected source categories included at the source are promulgated.

(c) Notwithstanding paragraph (a), the Permittee shall comply with an applicable promulgated MACT standard, including the initial notification requirements of the MACT standard, in accordance with the schedule provided in the MACT standard, if the MACT standard is promulgated prior to the Part 2 MACT Application deadline. If a MACT has been promulgated and the source is subject to the MACT, the Permittee shall submit an application for a significant permit modification under 326 IAC 2-7-12 no later than nine (9) months prior to the compliance date for the MACT. The application should include information regarding which portions of the MACT are applicable to the emission units at the source and which compliance options will be followed. If a permit renewal application is due before the date that a significant permit modification application would be due, the Permittee shall include the required information in the renewal application in lieu of submitting an application for a significant permit modification.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Galvanizing Line, identified as GAL-1, with a maximum capacity of 140,000 pounds of steel per hour consisting of the following equipment (Note: a portion of this line may be used as a continuous annealing line instead of galvanizing only):

a) Galvanizing Line Strip Dryer Furnace, identified as GL-01, with a maximum capacity of 2.0 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to the building interior.

b) Galvanizing Line Direct Fire Zone Furnace, identified as GL-02, with a maximum capacity of 45.3 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stack 002.

c) Galvanizing Line Radiant Heat Tube Furnace, identified as GL-03, with a maximum capacity of 13.2 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stack 003.

d) Galvanizing Line Chromate Spray Dryer Furnace, identified as GL-04, with a maximum capacity of 2.0 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to the building interior.

e) Galvanizing Line Spray Cleaning section with a brush scrubber and strip rinse, identified as GL-05, utilizing hot alkali solution, using mist elimination for control, and exhausting to stack 006.

f) Galvanizing Line Zinc Induction Melting section, identified as GL-06, with a maximum zinc melt capacity of 10,200 pounds per hour, using no control, and exhausting to the building interior.

g) Galvanizing Line Temper Mill, identified as GL-07, utilizing a detergent as the rolling fluid, using no control, and exhausting to the building interior.

h) Galvanizing Line Chromate Spray section, identified as GL-08, utilizing chromic acid, using no control, and exhausting to the building interior.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a), each of the units in the Galvanizing Line shall not discharge any gases containing more than 0.03 grain per dry standard cubic foot (gr/dscf) of particulate matter.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facility and any control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Prior to April, 2005, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM testing on the Galvanizing Line Spray Cleaner system outlet (GL-05) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

(b) During the period between 6 and 12 months after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.1.1 and in order to verify the emission factors used, the Permittee shall perform PM, PM-10, and chromate compound testing for the Galvanizing Line Chromate Spray GL-08) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.4 Particulate Matter (PM)

The mist eliminator for PM control shall be in operation at all times when the Galvanizing Line Spray Cleaning system is in operation. This requirement, in conjunction with the other provisions of this permit, make the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable. Note: The equipment covered in Section D.1 of this approval are not considered to be part of the nested source with regard to PSD applicability.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Monitoring

(a) Monthly inspections shall be performed on the mist eliminator from the galvanizing line spray cleaning section (GL-05) to ensure proper operation. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.5, the Permittee shall maintain a log of the monthly inspections on the mist eliminator including the status of the inspection and any response measures taken.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Three (3) Package Boilers, identified as PB-1 through PB-3, with a maximum capacity of 33.48 million BTU per hour each, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stacks 005A, 005B, and 005C respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 General Provisions Relating to NSPS [326 IAC 12][40 CFR 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the boilers (PB-1, PB-2, PB-3)) except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.2.2 Particulate Matter (PM) [326 IAC 6-1-2(b)]

Pursuant to 326 IAC 6-1-2(b)(Particulate Limitations, Fuel Combustion), particulate matter (PM) emissions from the boilers (PB-1, PB-2, and PB-3) shall be limited to 0.01 grain per dry standard cubic foot.

D.2.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The boilers (PB-1, PB-2, and PB-3) are not considered to be part of the nested source with regards to the applicability of 326 IAC 2-2 (Prevention of Significant Deterioration).

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.5 NSPS Record Keeping Requirements [40 CFR 60.48c, Subpart Dc]

Pursuant to 40 CFR 60.48c(a) the Permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 (Subpart A). This notification shall include: The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

D.2.6 NSPS Fuel Use Recordkeeping [40 CFR 60.48c, Subpart Dc]

(a) Pursuant to 40 CFR 60.48c(g) the Permittee shall record and maintain records of the amounts of each fuel combusted during each day.

(b) Pursuant to 40 CFR 60.48c(i) all records required under this regulation shall be maintained by the Permittee for a period of two years following the date of such record.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Pickle Line, identified as PL-1, with a maximum capacity of 800,000 pounds of steel per hour, utilizing Hydrochloric Acid as the pickling liquor, consisting of the following equipment:

a) Four (4) pickle tanks, identified as pickle tank #1 through pickle tank #4, with a maximum capacity of 5,200 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

b) One(1) five-chamber cascading re-circulating rinse tank, identified as rinse tank #1, with a maximum capacity of 3,800 gallons, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

c) Strip Dryer, identified as PL-dryer, with a maximum capacity of 5,900 scfm of air heated in the package boilers, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

d) Two (2) fresh acid storage tanks, identified as Tank #1 and Tank #2, with a maximum capacity of 24,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

e) Four (4) pickle liquor re-circulation tanks, identified as Tank #3 through Tank #6, with a maximum capacity of 12,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

f) Spent rinse water storage tank, identified as Tank #9 , with a maximum capacity of 12,000 gallons, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

g) Two (2) spent liquor storage tanks, identified as Tank #7 and #8, with a maximum capacity of 24,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

h) Electrostatic Oiler, identified as PL-oiler, with maximum capacity of 0.65 pounds of oil per ton of steel, using no control and exhausting to the building interior.

i) Welding / Shearing operations to conduct continuous pickling.

j) Pickle Line Scale Breaker, controlled by a Wheelabrator baghouse (Model 120 Series 6P), and exhausting to stack 007.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the pickle line (PL-1) described in this section except when otherwise specified in 40 CFR Part 63, Subpart CCC.

D.3.2 NESHAP for Steel Pickling - HCl Process Facilities [40 CFR 63.1158, Subpart CCC]

The Hydrochloric Acid Pickling line (PL-1) is subject to the provisions of 40 CFR 63, Subpart CCC because the operation is a major source of Hazardous Air Pollutants (HAPs) and the specific process is covered by the referenced Subpart.

D.3.3 NESHAP for Steel Pickling - HCl Process Facilities [40 CFR 63.1158, Subpart CCC]

The Permittee shall not cause or allow to be discharged into the atmosphere from the affected continuous pickling line (PL-1)

1. Any gases that contain HCl in a concentration in excess of 6 ppmv; or
2. HCl at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

D.3.4 NESHAP Operational and Equipment Standards (Hydrochloric Acid Storage Vessels) [40 CFR 63.1159, Subpart CCC]

The Permittee shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

D.3.5 NESHAP Maintenance Requirements [40 CFR 63.1160, Subpart CCC]

The Permittee shall comply with the operation and maintenance requirements of 40 CFR 63.6(e) (Subpart A, General Provisions). Additionally, the Permittee shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan is incorporated by reference into the source's Title V Permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

1. Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
2. Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;
3. Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;
4. Require an inspection of each scrubber at intervals of no less than 3 months with;
   A. Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
   B. Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
   C. Repair or replacement of droplet eliminator elements as needed;
   D. Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
   E. Adjustment of damper settings for consistency with the required air flow.
5. If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.
6. The Permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement.
7. The Permittee shall maintain a record of each inspection, including each item identified in 4 above, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

D.3.6 NESHAP Monitoring Requirements[40 CFR 63.1162, Subpart CCC]

The Permittee shall comply with the following monitoring provisions:

1. The Permittee shall install, operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in 40 CFR 63.1160(b)(2).

2. Failure to record each of the operating parameters listed in above is a violation of the monitoring requirements.

3. Each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

4. The Permittee may develop and implement alternative monitoring requirements subject to approval by VCAPC and IDEM, OAQ.

5. The Permittee shall inspect each affected hydrochloric acid storage vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

D.3.7 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The hydrochloric acid pickle line (PL-1) is not considered to be part of the nested source with regards to the applicability of 326 IAC 2-2 (Prevention of Significant Deterioration).

D.3.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.9 NESHAP Performance testing and test methods[40 CFR 63.1161, Subpart CCC]

1. The Permittee shall conduct an initial performance test for each affected process or control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR 63.7 (Subpart A, General Provisions). This initial performance test shall meet the following minimum requirements:
   A. Following approval of the site-specific test plan, the Permittee shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).
   B. Compliance with the applicable emission concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.
   C. Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard or the average measured concentration of HCl exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.
   D. Pursuant to 40 CFR 63.7(a)(2)(ii) this initial performance test was conducted on February 14, 2000 and shall be repeated annually.

2. The Permittee, during the performance test for each emission control device, using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The Permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per 40 CFR 63.1161(a)(2). The Permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the Permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

3. The following test methods from Appendix A of 40 CFR Part 60 shall be used to determine compliance

under Condition D.3.3 if required:

A. Method 1, to determine the number and location of sampling points, with the exception that no sampling traverse point shall be within one inch of the stack or duct wall;
B. Method 2, to determine gas velocity and volumetric flow rate;
C. Method 3, to determine the molecular weight of the stack gas;
D. Method 4, to determine the moisture content of the stack gas; and
E. Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources – Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (dscm) [30 dry standard cubic feet (dscf)]. The concentration of HCl shall be calculated for each run as follows: $C_{HCL(ppmv)} = 0.659\ C_{HCL(mg/dscm)}$, where $C_{(ppmv)}$ is concentration in ppmv and $C_{(mg/dscm)}$ is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.
F. The Permittee may use equivalent alternative measurement methods approved by U.S. EPA.

4. The Permittee shall conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR 63.1161. Performance tests shall be conducted annually. If any performance test shows that the HCl emission limitation is being exceeded, then the Permittee is in violation of the emission limit.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.10 Visible Emissions Notations

(a) Once per shift visible emission notations of the Pickle Line Scale Breaker stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.11 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Pickle Line Scale Breaker, at least once per shift when the Pickle Line Scale Breaker is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ and VCAPC, and shall be calibrated at least once every six (6) months.

D.3.12 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the Pickle Line Scale Breaker operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.3.13 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.14 NESHAP Notification Requirements [40 CFR 63.1163, Subpart CCC]

The Permittee shall submit the following written notifications to VCAPC and IDEM, OAQ.

1. The Permittee shall submit an initial notification pursuant to the requirements of 40 CFR 63.9(b)(4) (Subpart A, General Provisions). The notification shall provide the information specified in 40 CFR 63.9(b)(4)(i) through 63.9(b)(4)(v), delivered or postmarked with the notification required in 40 CFR 63.9(b)(5).
2. If the source is subject to special compliance requirements as specified in 40 CFR 63.6(b)(3) and (4), the Permittee shall notify U.S. EPA of their compliance obligations not later than the notification dates established in 40 CFR 63.9(b) for new sources that are not subject to the special provisions.
3. The Permittee shall notify U.S. EPA, VCAPC and IDEM, OAQ in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow U.S. EPA, VCAPC and IDEM, OAQ to review and approve the site-specific test plan required under 40 CFR 63.7(c), if requested by U.S. EPA, VCAPC or IDEM, OAQ, and to have an observer present during the test.
4. The permittee shall submit a notification of compliance status as required by 40 CFR 63.9(h).

D.3.15 NESHAP Reporting Requirements [40 CFR 63.1164, Subpart CCC]

1. The Permittee shall complete the following reporting requirements:
   A. The Permittee shall report the results of the initial performance test, and any subsequent performance tests, as part of the notification of compliance status required in Condition D.3.14.
   B. If the Permittee receives an extension on compliance, then the Permittee shall submit progress reports to VCAPC and IDEM, OAQ pursuant to 40 CFR 63.6(i) (Subpart A, General Provisions) by the dates specified in the written extension of compliance.
   C. The Permittee is required by 40 CFR 63.6(e) to operate and maintain each affected emission source, including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions (at least to the level required by the standard) at all times, including startup, shutdown and malfunction. Malfunctions must be corrected as soon

as practicable after their occurrence in accordance with the startup, shutdown and malfunction plan.

i. The Permittee is required by 40 CFR 63.6(e)(3) to develop and implement a written startup, shutdown and malfunction plan that provides a detailed description of the procedures for operating and maintaining the emission source or control system during a period of startup, shutdown or malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.

ii. As required by 40 CFR 63.10(d)(5)(i), actions taken during a startup, shutdown or malfunction by the Permittee that are consistent with the procedures specified in the startup, shutdown, and malfunction plan shall be stated in a semiannual report. The report, to be certified by the Permittee or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half.

iii. Actions taken during a startup, shutdown or malfunction that are not consistent with the procedures specified in the startup, shutdown, and malfunction plan shall meet all the requirements under 40 CFR 63.10(d)(5)(ii).

D.3.16 NESHAP Recordkeeping requirements [40 CFR 63.1165, Subpart CCC]

1. The Permittee, as required by 40 CFR 63.10(b)(2) (Subpart A, General Provisions), shall maintain general records for 5 years from the date of each record of:
   A. The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
   B. The occurrence and duration of each malfunction of the air pollution control equipment;
   C. All maintenance performed on the air pollution control equipment;
   D. Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
   E. All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form. (See 40 CFR 63.10(b)(2)(v));
   F. All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
   G. All results of initial or subsequent performance tests;
   H. If the Permittee has been granted a waiver from recordkeeping or reporting under 40 CFR 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;
   I. If the Permittee has been granted a waiver from the initial performance test under 40 CFR 63.7(h), a copy of the full request and U.S. EPA approval or disapproval;
   J. All documentation supporting initial notifications and notifications of compliance status required by 40 CFR 63.9; and
   K. Records of any applicability determination, including supporting analyses.

2. In addition to the general records required in (1) of this condition, the Permittee shall maintain records for 5 years from the date of each record of:
   A. Scrubber makeup water flow rate and recirculation water flow rate;
   B. Calibration and manufacturer certification that monitoring devices are accurate to within 5-percent and of semiannual calibration;
   C. Each maintenance inspection and repair, replacement, or other corrective action; and
   D. The Permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by US EPA, VCAPC and IDEM, OAQ for the life of the affected source or until the source is no longer subject to these provisions. In addition, if the operation and maintenance plan is revised, the Permittee shall keep previous

(i.e., superseded) versions of the plan on record to be made available for inspection by US EPA, VCAPC and IDEM, OAQ for a period of 5 years after each revision to the plan.

3. The records required in this condition for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

D.3.17 Record Keeping Requirements

(a) To document compliance with Condition D.3.10, the Permittee shall maintain records of each shift visible emission notation of the Pickle Line Scale Breaker stack exhaust.

(b) To document compliance with Condition D.3.11, the Permittee shall maintain the following:

(1) Once per shift records of the total static pressure drop during normal operation when venting to the atmosphere.

(2) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.3.12, the Permittee shall maintain records of the results of the inspections required under Condition D.3.12 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

1. Batch Annealing system consisting of 18 bases and 9 batch annealing furnaces. The furnaces are identified as BA-01 through BA-09, with a maximum capacity of 6.0 million BTU per hour each, primarily fired on natural gas but also consuming evaporated oil from the coils being annealed and having propane backup, using low NO_x burners for control, and exhausting to the building interior.

2. Two Stand Reversing Cold Mill, identified as RCM-1, with a maximum capacity of 400,000 pounds of steel per hour, using a progressive purification filter system with stack skimming for control, and exhausting to stack 004.

3. Temper Mill, identified as TM-1, with a maximum capacity of 158,000 pounds of steel per hour, using no control and exhausting to the building interior.

4. Seven (7) space heating units, with a maximum capacity of 6.6 million BTU per hour each, fired on either natural gas or propane.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(a), the Batch Annealing System(BA01 - BA09), Two Stand Reversing Cold Mill (RCM-1), Temper Mill (TM-1), and the Space Heating Units shall not discharge any gases containing more than 0.03 grain per dry standard cubic foot (g/dscf) of particulate matter.

D.4.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The Batch Annealing system, Reversing Cold Mill (RCM-1) and Temper Mill (TM-1) are considered to be part of the nested source with regards to the applicability of 326 IAC 2-2 (Prevention of Significant Deterioration).

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Prior to June, 2005, in order to demonstrate compliance with Condition D.4.1, the Permittee shall perform PM testing on the Progressive Purification filter system outlet utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

(b) During the period between 6 and 12 months after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.4.1 and to verify the emission factors, the Permittee shall perform PM, PM-10, and VOC testing for the Temper Mill exhaust utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.4.5 Particulate Matter (PM)

The progressive purification system for PM control shall be in operation at all times when the Reversing Cold Mill is in operation. This requirement, in conjunction with the other provisions of this permit, make the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.6 Monitoring

(a) Monthly inspections shall be performed on the progressive purification filter system to ensure proper operation. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.7 Record Keeping Requirements

(a) To document compliance with Condition D.4.1 and D.4.6, the Permittee shall maintain a log of the monthly inspections on the progressive purification filter system including the status of the inspection and any response measures taken.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
VIGO COUNTY AIR POLLUTION CONTROL

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: CSN, LLC
Source Address: 455 West Industrial Drive, Terre Haute, Indiana 47802
Mailing Address: 455 West Industrial Drive, Terre Haute, Indiana 47802
Part 70 Permit No.: T167-12516-00120

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

VIGO COUNTY AIR POLLUTION CONTROL

103 South 3rd Street
Terre Haute, Indiana 47807

Phone: 812-462-3433
Fax: 812-462-3447

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: CSN, LLC
Source Address: 455 West Industrial Drive, Terre Haute, Indiana 47802
Mailing Address: 455 West Industrial Drive, Terre Haute, Indiana 47802
Part 70 Permit No.: T167-12516-00120

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- C The Permittee must notify the Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC), within four (**4**) business hours (IDEM: 1-800-451-6027 or 317-233-5674, ask for Compliance Section and VCAPC: 812-462-3433); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) working days (IDEM Facsimile Number: 317-233-5967 and VCAPC), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: CSN. LLC
Source Address: 455 West Industrial Drive, Terre Haute, Indiana 47802
Mailing Address: 455 West Industrial Drive, Terre Haute, Indiana 47802
Part 70 Permit No.: T167-12516-00120

9	Natural Gas Only
9	Alternate Fuel burned From:_____ To:_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Phone:
Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name:CSN, LLC
Source Address:455 West Industrial Drive, Terre Haute, Indiana 47802
Mailing Address: 455 West Industrial Drive, Terre haute, Indiana 47802
Part 70 Permit No.: T167-12516-00120

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: ______________________________

Title/Position: ______________________________

Date: ______________________________

Phone: ______________________________

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality
and
Vigo County Air Pollution Control

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	Companhia Siderugica Nacional, LLC (CSN, LLC) (Formerly Heartland Steel, Inc.)
Source Location:	455 West Industrial Drive, Terre Haute, Indiana 47802
County:	Vigo County
SIC Code:	3316
Operation Permit No.:	T167-12516-00120
Permit Reviewer:	Rob Harmon

The Office of Air Quality (OAQ) and Vigo County Air Pollution Control (VCAPC) have reviewed a Part 70 permit application from CSN, LLC (formerly known as Heartland Steel, Inc.) relating to the operation of a steel processing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

1. Galvanizing Line, identified as GAL-1, with a maximum capacity of 140,000 pounds of steel per hour consisting of the following equipment (Note: a portion of this line may be used as a continuous annealing line instead of galvanizing only):
   a) Galvanizing Line Strip Dryer Furnace, identified as GL-01, with a maximum capacity of 2.0 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to the building interior.

   b) Galvanizing Line Direct Fire Zone Furnace, identified as GL-02, with a maximum capacity of 45.3 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stack 002.

   c) Galvanizing Line Radiant Heat Tube Furnace, identified as GL-03, with a maximum capacity of 13.2 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stack 003.

   d) Galvanizing Line Chromate Spray Dryer Furnace, identified as GL-04, with a maximum capacity of 2.0 million BTU per hour, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to the building interior.

   e) Galvanizing Line Spray Cleaning section with a brush scrubber and strip rinse, identified as GL-05, utilizing hot alkali solution, using mist elimination for control, and exhausting to stack 006.

   f) Galvanizing Line Zinc Induction Melting section, identified as GL-06, with a maximum zinc melt capacity of 10,200 pounds per hour, using no control, and exhausting to the building interior.

   g) Galvanizing Line Temper Mill, identified as GL-07, utilizing a detergent as the rolling fluid, using no control, and exhausting to the building interior.

h) Galvanizing Line Chromate Spray section, identified as GL-08, utilizing chromic acid, using no control, and exhausting to the building interior.

2. Three (3) Package Boilers, identified as PB-1 through PB-3, with a maximum capacity of 33.48 million BTU per hour each, primarily fired on natural gas but with propane backup, using low NO_x burners for control, and exhausting to stacks 005A, 005B, and 005C respectively.

3. Pickle Line, identified as PL-1, with a maximum capacity of 800,000 pounds of steel per hour, utilizing Hydrochloric Acid as the pickling liquor, consisting of the following equipment:
   a) Four (4) pickle tanks, identified as pickle tank #1 through pickle tank #4, with a maximum capacity of 5,200 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   b) One(1) five-chamber cascading re-circulating rinse tank, identified as rinse tank #1, with a maximum capacity of 3,800 gallons, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   c) Strip Dryer, identified as PL-dryer, with a maximum capacity of 5,900 scfm of air heated in the package boilers, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   d) Two (2) fresh acid storage tanks, identified as Tank #1 and Tank #2, with a maximum capacity of 24,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   e) Four (4) pickle liquor re-circulation tanks, identified as Tank #3 through Tank #6, with a maximum capacity of 12,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   f) Spent rinse water storage tank, identified as Tank #9 , with a maximum capacity of 12,000 gallons, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   g) Two (2) spent liquor storage tanks, identified as Tank #7 and #8, with a maximum capacity of 24,000 gallons each, using a packed tower wet scrubber for control (including a chevron blade entrainment separator), and exhausting to stack 001.

   h) Electrostatic Oiler, identified as PL-oiler, with maximum capacity of 0.65 pounds of oil per ton of steel, using no control and exhausting to the building interior.

   i) Welding / Shearing operations to conduct continuous pickling.

   j) Pickle Line Scale Breaker, controlled by a Wheelabrator baghouse (Model 120 Series 6P), and exhausting to stack 007.

4. Batch Annealing system consisting of 18 bases and 9 batch annealing furnaces. The furnaces are identified as BA-01 through BA-09, with a maximum capacity of 6.0 million BTU per hour each, primarily fired on natural gas but also consuming evaporated oil from the coils being annealed and having propane backup, using low NO_x burners for control, and exhausting to the building interior.

5. Two Stand Reversing Cold Mill, identified as RCM-1, with a maximum capacity of 400,000 pounds of steel per hour, using a progressive purification filter system with stack skimming for control, and exhausting to stack 004.

6. Temper Mill, identified as TM-1, with a maximum capacity of 158,000 pounds of steel per hour, using no control and exhausting to the building interior.

7. Seven (7) space heating units, with a maximum capacity of 6.6 million BTU per hour each, fired on either natural gas or propane.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

1. Space heaters, process heaters, or boilers using the following fuels.
   a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) BTU per hour.
   b) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) BTU per hour.

2. Equipment powered by internal combustion engines of capacity equal to or less than 500,000 BTU/hr, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 BTU/hr.

3. A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a torage capacity less than or equal to 10,500 gallons.

4. A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

5. The following VOC and HAP storage containers:
   a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
   b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

6. Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

7. Machining where an aqueous cutting coolant continuously floods the machining interface.

8. The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

9. Rolling oil recovery systems.

10. Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

11. Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

12. Noncontact cooling tower systems with the following: Natural draft cooling towers not regulated under a NESHAP.

13. Quenching operations used with heat treating processes.

14. Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

15. Heat exchanger cleaning and repair.

16. Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

17. Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

18. Emergency generators as follows: Diesel generators not exceeding 1600 horsepower, including the following: two (2) emergency generators each rated at 1447 BHP (69.7 gallons per hour).

19. A laboratory as defined in 326 IAC 2-7-1(21)(D).

20. Other activites or categories (potential emissions of: less than 25 pounds per day of CO or NOx; less than 5 pounds per hour or 25 pounds per day of SO_2 or PM10; less than 3 pounds per hour or 15 pounds per day of VOC; less than 3.29 pounds per day or 0.6 tons per year for lead or lead compounds):
    a) Trimming operations
    b) Shear station on pickle line
    c) Electrostatic oiler on pickle line
    d) Temper mill on galvanizing line
    e) Fugitive emissions from paved/unpaved roads and lots
    f) Waste water treatment
    g) Oiler shear on slitter line
    h) Oiler on temper mill

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Minor Source Operating Permit 167-V039-00120, issued on July 19, 1999;

(b) Significant Source Modification 167-11837-00120, issued on November 2, 2000; and

(c) First Administrative Amendment 167-14778-00120, issued on September 13, 2001.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

(1) All erroneous particulate matter references to 326 IAC 6-2 or 6-3 have been revised to the correct 326 IAC 6-1 requirements.

(2) The VOC testing requirement on the Reversing Cold Mill (RCM-1) has been removed. Post construction testing demonstrated that the apparent VOC were in fact composed primarily of methane/ethane and therefore not regulated under the current air rules.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on

July 18, 2000. Additional information was received on December 14, 2000 and March 23, 2001.

A notice of completeness letter was mailed to the source on August 11, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (26 pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	Greater than 250
PM-10	Greater than 250
SO_2	Less than 100
VOC	Greater than 250
CO	Greater than 100, Less than 250
NO_x	Greater than 100, Less than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
HCl Mist	Greater than 10
Chromium Compounds	Less than 10
TOTAL	Greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10, VOC, CO, and NOx are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since part of this operation is one of the twenty-eight (28) listed source categories (see the Section titled "Potential to Emit After Issuance" for specifics on which part this applies to) under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ and VCAPC emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.70

PM-10	0.70
SO_2	0.09
VOC	0.54
CO	4.79
NO_x	3.87
HAP (specify)	not reported

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

In a letter dated July 12, 2000, US EPA Region V ruled that a source such as CSN LLC (Heartland Steel at the time) should be considered as having a nested source when determining PSD applicability. The entire operation is compared to the 250 ton per year limitation for sources that are not in one of the listed categories. The nested source portion only would be considered as a listed source (for the Iron and Steel Mill Plant category) and would therefore be compared to the 100 ton per year threshold. The operations are divided up based on their SIC Code. All operations with a two-digit SIC Code of 33 are considered as part of the nested source. The operations that fall into that two-digit SIC Code are: Batch Annealing (SIC 3398); Reversing Cold Rolling Mill (SIC 3316); and the Temper Mill (SIC 3398). The tables below shows the source status after all the changes this modification considers:

Entire Source

	Pollutant							
	PM	PM10	SO2	NOx	VOC	CO	HCL	Chromium
GL strip dryer	0.04	0.07	0.09	1.34	0.05	0.74		
GL direct fire	1.30	1.51	2.08	41.20	1.09	16.67		
GL radiant heat	0.38	0.44	0.61	12.01	0.32	4.86		
GL chrom spray dryer	0.04	0.07	0.09	1.34	0.05	0.74		
BA line furnaces	1.03	1.80	2.48	36.19	1.30	19.87		
Package Boilers	2.88	3.34	4.62	91.35	2.42	36.95		
PL HCL Emissions*	9.86	9.86					9.86	
GL spray cleaning*	0.70	0.70						
GL induction melting	2.23	2.23						
GL chromate spray	1.23	1.23						1.23
Reversing Cold Mill*	48.81	48.81			14.64			
Temper Mill	19.10	19.10			2.68			
Space Heaters	0.88	1.54	2.12	30.96	1.11	17.00		
Other Heating	0.06	0.10	0.14	2.01	0.07	0.53		
Generators	0.51	0.51	2.93	17.36	0.51	4.15		
Scale Breaker	0.38	0.38						
Total PTE (After Cont)	89.42	91.66	15.16	233.76	24.24	101.49	9.86	1.23

* - Indicates some form of limitation exists. Those limitations are: the Pickle Line Scrubber System must be in operation at all times; the Galv Line Spray Cleaning mist eliminator must be in operation at all times; and the Reversing Cold Mill progressive purification system must be in operation at all times.

Since no pollutant exceeds the 250 ton per year threshold, the source will still be considered as an existing minor source with regard to the PSD requirements.

Nested Source

	Pollutant							
	PM	PM10	SO2	NOx	VOC	CO	HCL	Chromium

BA line furnaces	1.03	1.80	2.48	36.19	1.30	19.87		
Reversing Cold Mill*	48.81	48.81			14.64			
Temper Mill	19.10	19.10			2.68			
Total PTE (After Cont)	68.94	69.70	2.48	36.19	18.62	19.87	0.00	0.00

* - Indicates some form of limitation exists. This limitation is: the Reversing Cold Mill progressive purification system must be in operation at all times.

Since no pollutant exceeds the 100 ton per year threshold, the nested source will still be considered as an existing minor source with regard to the PSD requirements.

County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM-10	attainment
SO_2	maintenance attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Vigo County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since part of this operation is one of the twenty-eight (28) listed source categories (see explanation above) under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) None of the storage tanks are subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb), due to either the size being smaller than 40 cubic meters or the stored fluid is not considered a VOL.

(b) The three (3) Package Boilers (PB-1, PB-2, and PB-3) are subject to the New Source

Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc). Because they are above 10 million BTU per hour and will be constructed after the June 9, 1989 date specified in the Subpart. However, since the only fuels to be used in these boilers are natural gas and propane, there are no specific emission standards. The source still has to comply with the initial notification requirements under 40 CFR 60.48c(a) and the fuel use record keeping requirements under 40 CFR 60.48c(g).

(c) The three (3) Package Boilers (PB-1, PB-2, and PB-3) are subject to the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated under 326 IAC 12, except when otherwise specified in 40 CFR Part 60, Subpart Dc.

(d) The Hydrochloric Acid Pickling line (PL-1) is a new major source of HAP and subject to the New Source Toxics Control rule, 326 IAC 2-4.1-1, which implements the federal Section 112(g) rule (40 CFR 63, Subpart B). This rule requires constructed or reconstructed major sources to install maximum achievable control technology (MACT) as determined by the permitting authority. Since the U.S. Environmental Protection agency has promulgated a MACT standard already for this source category under 40 CFR 63 Subpart CCC, there is no need to conduct an additional case-by-case MACT analysis. The provisions of the promulgated standard are applied directly. Therefore the HCl pickling line and related storage vessels are subject to the following provisions:

40 CFR 63.1158 **Emission standards for new or reconstructed sources**

[Continuous pickling lines]
(a)(1) requires the Permittee to not cause or allow to be discharged into the atmosphere from the affected pickling line (i) Any gases that contain HCl in a concentration in excess of 6 ppmv; or (ii) HCL at a mass emission rate that corresponds to a collection efficiency of less than 99 percent.

40 CFR 63.1159 **Operational and equipment standards for existing, new or reconstructed sources.**

[Hydrochloric acid storage vessels]
(b) requires the Permittee to provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

40 CFR 63.1160 **Compliance dates and maintenance requirements.**

[Compliance dates]
(a)(2) requires the Permittee to achieve compliance with the requirements of this subpart immediately upon startup of operations or by June 22, 1999, whichever is later. Since the Permit authorizing construction was not issued until after the publication date, this requirement is automatically effective immediately upon startup of operations.

[Maintenance Requirements]
(b)(1) requires the Permittee to comply with the operation and maintenance requirements prescribed under 40 CFR 63.6(e).

(b)(2) requires the Permittee to prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's Title V Permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:

1. Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may

indicate a need for maintenance;

2. Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;
3. Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;
4. Require an inspection of each scrubber at intervals of no less than 3 months with;
   a. Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
   b. Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
   c. Repair or replacement of droplet eliminator elements as needed;
   d. Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
   e. Adjustment of damper settings for consistency with the required air flow.
5. If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.
6. The Permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement.
7. The Permittee shall maintain a record of each inspection, including each item identified in 4 above, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

40 CFR 63.1161 **Performance testing and test methods**

[Demonstration of compliance]
(a) Requires the Permittee to conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements of 40 CFR 63.7 and in this section. This initial test was performed on February 14, 2000.

(a)(1) Requires the Permittee, following approval of the site-specific test plan, to conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

(a)(2) Specifies that compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations

(a)(3) Specifies that compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl exiting the process or the emission control device is less than or equal to the applicable

emission concentration standard.

[Establishment of scrubber operating parameters]
(b) Requires the Permittee, during the performance test for each emission control device, using a wet scrubber to achieve compliance to establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The Permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per 40 CFR 63.1161(a)(2). The Permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, the Permittee may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

[Test methods]
(d)(1) Lists the specific test methods (from Appendix A of 40 CFR 60) to be utilized to determine compliance under 40 CFR 63.1157(a), 40 CFR 63.1157(b), 40 CFR 63.1158(a) and 40 CFR 63.1158(b). Those are:

1. Method 1, to determine the number an location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;
2. Method 2, to determine gas velocity and volumetric flow rate;
3. Method 3, to determine the molecular weight of the stack gas;
4. Method 4, to determine the moisture content of the stack gas; and
5. Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources – Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentration of HCl shall be calculated for each run as follows: $C_{HCL(ppmv)} = 0.659\ C_{HCL(mg/dscm)}$, where $C_{(ppmv)}$ is concentration in ppmv and $C_{(mg/dscm)}$ is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

(d)(2) Specifies that the Permittee may use equivalent alternative measurement methods approved by the Administrator.

40 CFR 63.1162 **Monitoring requirements.**

(a)(1) The Permittee shall conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in 40 CFR 63.1161. Performance tests shall be conducted either annually or according to an alternative schedule that is approved by VCAPC and IDEM, but no less frequently than every 2-1/2 years or twice per Title V Permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the Permittee is in violation of the emission limit.

(a)(2) Additionally, if the Permittee is using a wet scrubber as the emission control device, the Permittee shall install, operate and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the

maintenance requirements in 40 CFR 63.1160(b)(2).

(a)(3) Specifies that if an emission control device other than a wet scrubber is used, the Permittee shall install, operate and maintain systems for the measurement and recording of the appropriate operating parameters.

(a)(4) Specifies that failure to record each of the operating parameters listed in (a)(2) above is a violation of the monitoring requirements.

(a)(5) Specifies that each monitoring device shall be certified by the manufacturer to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

(a)(6) Specifies that the Permittee may develop and implement alternative monitoring requirements subject to approval by VCAPC and IDEM, OAQ.

(c) The Permittee shall inspect each affected hydrochloric acid storage vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

40 CFR 63.1163 **Notification requirements**

[Initial notifications]
(a)(4) The Permittee is required by 40 CFR 63.9(b)(4) shall provide the information specified in 40 CFR 63.9(b)(4)(i) through 63.9(b)(4)(v).

[Request for extension of compliance]
(b) As required by 40 CFR 63.9(c), if the Permittee can not comply with this standard by the applicable compliance date for that source, the Permittee may submit to VCAPC and IDEM, OAQ a request for an extension of compliance as specified in 40 CFR 63.6(i)(4) through 40 CFR 63.6(i)(6). [CSN, LLC has met the initial compliance date]

[Notification that the source is subject to special compliance requirements]
(c) If the Permittee is subject to special compliance requirements under 40 CFR 63.6(b)(3) and 40 CFR 63.6(b)(4) then the Permittee shall meet the notification requirements under 40 CFR 63.9(b).

[Notification of performance test]
(d) The Permittee shall notify US EPA, VCAPC and IDEM, OAQ (as required by 40 CFR 63.9(e)) in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, to allow US EPA, VCAPC and IDEM, OAQ to review and approve the site-specific test plan required under 40 CFR 63.7(c) and, if requested by US EPA, VCAPC or IDEM, OAQ, to have an observer present during the test.

[Notification of compliance status]
(e) The Permittee shall submit a notification of compliance status as required by 40 CFR 63.9(h) when the source becomes subject to this standard.

40 CFR 63.1164 **Reporting requirements**

[Reporting results of performance tests]
(a) The Permittee shall report the results of any performance test (as required by 40 CFR 63.10(d)(2)) as part of the notification of compliance status (required in 40 CFR 63.1163).

[Progress reports]
(b) The Permittee, if required to submit progress reports under 40 CFR 63.6(i), shall submit

such reports to VCAPC and IDEM, OAQ by the dates specified in the written extension of compliance.

[Periodic startup, shutdown and malfunction reports]
(c) The Permittee is required by 40 CFR 63.6(e) to operate and maintain each affected emission source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

[Plan]
(c)(1) The Permittee, as required by 40 CFR 63.6(e)(3), shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.

[Reports]
(c)(2) As required by 40 CFR 63.10(d)(5)(i), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the Permittee shall state such information in a semiannual report. The report, to be certified by the responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of the calendar half; and

(c)(3) Any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall comply with all requirements of 40 CFR 63.10(d)(5)(ii).

40 CFR 63.1165 **Recordkeeping requirements**

[General recordkeeping requirements]
(a) As required by 40 CFR 63.10(b)(2), the Permittee shall maintain records for 5 years from the date of each record of:

1. The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
2. The occurrence and duration of each malfunction of the air pollution control equipment;
3. All maintenance performed on the air pollution control equipment;
4. Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
5. All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see 40 CFR 63.10(b)(2)(v));
6. All required measurements needed to demonstrate compliance with a standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

7. All results of initial or subsequent performance tests;
8. If the Permittee has been granted a waiver from recordkeeping or reporting under 40 CFR 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;
9. If the Permittee has been granted a waiver from the initial performance test under 40 CFR 63.7(h), a copy of the full request and the Administrator's approval or disapproval;
10. All documentation supporting initial notifications of compliance status required by 40 CFR 63.9; and
11. Records of any applicability determination, including supporting analyses.

[Subpart CCC records]
(b)(1) In addition to the general records required by (a) above, the Permittee shall maintain records for 5 years from the date of each record of:

1. Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used;
2. Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
3. Each maintenance inspection and repair, replacement, or other corrective action.

(b)(3) The Permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by VCAPC and IDEM, OAQ for the life of the affected source or until the source is no longer subject to these provisions. In addition, if the operation and maintenance plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by VCAPC and IDEM, OAQ for a period of 5 years after each revision to the plan.

(c) General records and subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart CCC.

(e) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated under 326 IAC 12, apply to the hydrochloric acid pickle line (PL-1) except when otherwise specified in 40 CFR 63 Subpart CCC.

(f) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are applicable to this source because the source is a major source of HAPs (i.e., the source has the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs) and the source includes one or more units that belong to one or more source categories affected by the Section 112(j) Maximum Achievable Control Technology (MACT) Hammer date of May 15, 2002. This rule requires the source to:

(1) Submit a Part 1 MACT Application by May 15, 2002; and

(2) Submit a Part 2 MACT Application within twenty-four (24) months after the Permittee submitted a Part 1 MACT Application.

The Permittee failed to submit a timely Part 1 MACT Application. IDEM, OAQ has requested that the Permittee submit a Part 1 MACT Application. The Permittee is required to submit a Part 2 MACT Application on or before May 15, 2004. Note that on April 25, 2002, Earthjustice filed a lawsuit against the US EPA regarding the April 5, 2002 revisions to the rules implementing Section 112(j) of the Clean Air Act. In particular, Earthjustice is challenging the US EPA's 24-month period between the Part 1 and Part 2 MACT Application due dates. Therefore, the Part 2

MACT Application due date may be changed as a result of the suit.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to a US EPA Region V ruling (dated July 12, 2000), CSN, LLC is considered to be a nested source. As such, CSN, LLC is not a major source with regard to the Prevention of Significant Deterioration (PSD) program because the entire source does not have 250 tons per year potential to emit, and the nested Iron and Steel Mill components (SIC Codes 33xx) do not have 100 tons per year potential to emit. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of NOx and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

CSN, LLC is not located in the small area specified in 326 IAC 5-1-1(c)(8). Therefore they are not subject to the more stringent requirements under 326 IAC 5-1-2(2).

State Rule Applicability - Individual Facilities

As a result of previous incorrect determinations applicability the following rule applicability determinations have changed:

326 IAC 6-2-4 (Particulate Matter Limits for Sources of Indirect Heating)

Since Vigo County is still listed under 326 IAC 6-1-7, this source should be regulated by 326 IAC 6-1-2 instead of 326 IAC 6-2-4. All references to 6-2-4 have been removed and replaced by the appropriate regulation.

326 IAC 6-3-2 (Process Operations)

Since Vigo County is still listed under 326 IAC 6-1-7, this source should be regulated by 326 IAC 6-1-2 instead of 326 IAC 6-3-2. All references to 326 IAC 6-3-2 have been removed and replaced by the appropriate regulation.

326 IAC 6-1-2 (Particulate Rules; general sources, fuel combustion steam generators)

Pursuant to 326 IAC 6-1-2(a), the general particulate matter generating emission units shall not discharge any gases containing more than 0.03 grain per dry standard cubic foot (g/dscf) of particulate matter. [This applies to the Galvanizing Line, Pickle Line, Reversing Cold Mill, and Temper Mill specifically]

Pursuant to 326 IAC 6-1-2(b), the fuel combustion steam generator operations shall not discharge any

gas containing more than 0.01 grain per dry standard cubic foot (for gaseous fuels). [This applies to the three (3) boilers]

The batch annealing process and the space heaters do combust fuel, but they do not meet the definition of combustion steam generator and are therefore not subject to the requirements of 326 IAC 6-1-2(b). However, they would be subject to 326 IAC 6-1-2(a) as general particulate sources. Pursuant to 326 IAC 6-1-2(a), the general particulate matter generating emission units shall not discharge any gases containing more than 0.03 grain per dry standard cubic foot (g/dscf) of particulate matter.

Previous rule determinations (carried through to this approval):

326 IAC 8-1-6 (VOC General Emission Reduction)

There are no facilities at this source subject to 326 IAC 8-1-6 because no individual facility has potential emissions of at least 25 tons of VOC per year.

Testing Requirements

The existing MSOP required both PM and PM10 testing for the Galvanizing Line Spray Cleaner (GL-05). These tests were to be completed both initially and at least once every five (5) years. It has since been determined that the PM10 testing is no longer required, since there is not an applicable limitation. The PM testing serves as a compliance tool for 6-1-2, as well as a verification of the emission factors used. This initial test was performed on April 3, 2000, therefore the next test should be conducted prior to April 3, 2005.

The existing MSOP required PM, PM10 and VOC testing for the Reversing Cold Mill (RCM-1). These tests were to be completed both initially and at least once every five (5) years. There are 2 findings that affect the testing of this emission unit. First, the PM10 testing is no longer required, since there is not an applicable limitation. Second, the VOC testing is also no longer required, since subsequent testing indicated that most (if not all) of the material previously identified as a VOC was in fact either methane or ethane which are organic, but not VOC. The initial test was performed on June 21 and 22, 2000 and the additional VOC testing was performed on February 7, 2001. Therefore the next PM test should be conducted prior to June 21, 2005.

An alternate emission factor was developed for the Galvanizing Line Chromate Spray section within the initial MSOP, however, this unit was not required to test in order to verify this. As part of the Part 70 Permit a stack test for PM, PM10, and chromate compounds emitted from this process is required.

An alternate emission factor was developed for the Temper Mill within the initial MSOP, however, this unit was not required to test in order to verify this. As part of the Part 70 Permit a stack test for PM, PM10, and VOC emitted from this process is required.

The existing MSOP required HCl testing pursuant to the requirements of the applicable NESHAP (40 CFR 63, Subpart CCC). This currently requires annual testing. This testing has not been modified.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ and VCAPC, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will

be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The Galvanizing Line (GAL-1) has applicable compliance monitoring conditions as specified below:

   (a) Monthly inspections shall be performed on the mist eliminator controlling emissions from the Galvanizing Line Spray Cleaning section (GL-05) to ensure proper operation. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change occurs. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

   (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

   These monitoring conditions are necessary because the mist eliminator for the Galvanizing Line Spray Cleaning system must operate properly to ensure compliance with 326 IAC 6-1 (Particulate Limitations) and 326 IAC 2-7 (Part 70).

2. The Two Stand Reversing Cold Mill (RCM-1) has applicable compliance monitoring conditions as specified below:

   (a) Monthly inspections shall be performed on the Progressive Purification filter system controlling emissions from the Two Stand Reversing Cold Mill to ensure proper operation. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change occurs. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

   (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

   These monitoring conditions are necessary because the Progressive Purification filter system for the Two Stand Reversing Cold Mill must operate properly to ensure compliance with 326 IAC 6-1 (Particulate Limitations) and 326 IAC 2-7 (Part 70).

3. The Pickle Line (PL-1) has applicable compliance monitoring conditions as specified in the applicable NESHAP (40 CFR 63, Subpart CCC). Those requirements are all detailed above in the Federal Rule Applicability section.

4. The Pickle Line Scale Breaker has applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the Pickle Line Scale Breaker exhaust shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of

batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Pickle Line Scale Breaker, at least once per shift when the Pickle Line Scale Breaker is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) The Permittee shall perform quarterly inspections of all bags controlling the Pickle Line Scale Breaker operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Conclusion

The operation of this steel processing plant shall be subject to the conditions of the attached proposed **Part 70 Permit No. T167-12516-00120.**

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Space Heating - Natural Gas Combustion
Using SCC 1-03-006-03
Seven (7) Units rated at 6.6 MMBTU/Hr each

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
46.2	404.7

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.38	1.54	0.12	20.24	1.11	17.00

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Space Heating - Propane Combustion
Less than 10 MMBTU per hour Units
Seven (7) Units rated at 6.6 MMBTU/Hr each

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content =	grains/100ft^3
46.20	4423.08	9.60	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.4	0.4	1.0 *(0.10S)*	14.0	0.5 **TOC value	1.9
Potential Emission in tons/yr	0.88	0.88	2.12	30.96	1.11	4.20

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.38	1.54	0.12	20.24	1.11	17.00
Heaters using Propane	0.88	0.88	2.12	30.96	1.11	4.20
Worst Case	0.88	1.54	2.12	30.96	1.11	17.00

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Space Heating - Natural Gas Combustion
Using SCC 1-03-006-03
Miscellaneous Space Heating (All Assumed to be less than 0.3 MMBTU/Hr)

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
3.0	26.3

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	94.0	5.5	40.0
Potential Emission in tons/yr	0.02	0.10	0.01	1.24	0.07	0.53

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Space Heating - Propane Combustion
Less than 10 MMBTU per hour Units
Miscellaneous Space Heating (All Assumed to be less than 0.3 MMBTU/Hr)

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content = 9.60 grains/100ft^3
3.00	287.21	

	Pollutant					
Emission Factor in lb/kgal	PM* 0.4	PM10* 0.4	SO2 1.0 *(0.10S)*	NOx 14.0	VOC 0.5 **TOC value	CO 1.9
Potential Emission in tons/yr	0.06	0.06	0.14	2.01	0.07	0.27

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.02	0.10	0.01	1.24	0.07	0.53
Heaters using Propane	0.06	0.06	0.14	2.01	0.07	0.27
Worst Case	0.06	0.10	0.14	2.01	0.07	0.53

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Large (>600 HP) Recipricating Internal Combustion Engines
Two units, each rated at 1447 Bhp (69.7 gallons per hour) fired on diesel fuel

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity MM Btu/hr	Percent Sulfur
19.5	0.5

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.1	0.1	0.51 *1.01*S*	3.20	0.1	0.85
Potential Emission in tons/yr	0.49	0.49	2.46	15.61	0.44	4.15

B. Emissions calculated based on output rating (hp)

Heat Input Capacity Horsepower (hp)	Potential Throughput hp-hr/yr
2894.0	1447000.0

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0007	0.0007	0.0040 *0.00809*S*	0.0240	0.0007	0.0055
Potential Emission in tons/yr	0.51	0.51	2.93	17.36	0.51	3.98

Methodology

Potential Througput (hp-hr/yr) = hp * 500 hr/yr [since emergency use only]

Emission Factors are from AP42 (Supplement B 10/96), Table 3.4-1
Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 500 hr/yr / (2,000 lb/ton) [since emergency use only]
Emission (tons/yr) = [Potential Throughput (hp-/hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Strip Dryer Furnace - Natural Gas Combustion
Using SCC 1-03-006-03
rated at 2.0 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.0	17.5

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	50.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.07	0.01	0.44	0.05	0.74

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Strip Dryer Furnace - Propane Combustion
Less than 10 MMBTU per hour Units
rated at 2.0 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content = 9.60 grains/100ft^3
2.0	191.48	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.4	0.4	1.0 *(0.10S)*	14.0	0.5 **TOC value	1.9
Potential Emission in tons/yr	0.04	0.04	0.09	1.34	0.05	0.18

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.02	0.07	0.01	0.44	0.05	0.74
Heaters using Propane	0.04	0.04	0.09	1.34	0.05	0.18
Worst Case	0.04	0.07	0.09	1.34	0.05	0.74

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Direct Fire Zone Furnace - Natural Gas Combustion
Using SCC 1-03-006-02
rated at 45.3 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
45.3	396.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	50.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.38	1.51	0.12	9.92	1.09	16.67

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Direct Fire Zone Furnace - Propane Combustion
Greater than 10 MMBTU per hour Units
rated at 45.3 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content = 9.60 grains/100ft^3
45.3	4336.92	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.6	0.6	1.0 *(0.10S)*	19.0	0.5 **TOC value	3.2
Potential Emission in tons/yr	1.30	1.30	2.08	41.20	1.08	6.94

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.38	1.51	0.12	9.92	1.09	16.67
Heaters using Propane	1.30	1.30	2.08	41.20	1.08	6.94
Worst Case	1.30	1.51	2.08	41.20	1.09	16.67

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Radiant Heat Tube Furnace - Natural Gas Combustion
Using SCC 1-03-006-02
rated at 13.2 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
13.2	115.6

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	50.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.11	0.44	0.03	2.89	0.32	4.86

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Radiant Heat Tube Furnace - Propane Combustion
Greater than 10 MMBTU per hour Units
rated at 13.2 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content = 9.60 grains/100ft^3
13.2	1263.74	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.6	0.6	1.0 *(0.10S)*	19.0	0.5 **TOC value	3.2
Potential Emission in tons/yr	0.38	0.38	0.61	12.01	0.32	2.02

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.11	0.44	0.03	2.89	0.32	4.86
Heaters using Propane	0.38	0.38	0.61	12.01	0.32	2.02
Worst Case	0.38	0.44	0.61	12.01	0.32	4.86

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Chromate Spray Dryer Furnace - Natural Gas Combustion
Using SCC 1-03-006-03
rated at 2.0 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.0	17.5

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	50.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.07	0.01	0.44	0.05	0.74

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Chromate Spray Dryer Furnace - Propane Combustion
Less than 10 MMBTU per hour Units
rated at 2.0 MMBTU/Hr

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content = 9.60 grains/100ft^3
2.0	191.48	

	Pollutant					
Emission Factor in lb/kgal	PM* 0.4	PM10* 0.4	SO2 1.0 *(0.10S)*	NOx 14.0	VOC 0.5 **TOC value	CO 1.9
Potential Emission in tons/yr	0.04	0.04	0.09	1.34	0.05	0.18

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.02	0.07	0.01	0.44	0.05	0.74
Heaters using Propane	0.04	0.04	0.09	1.34	0.05	0.18
Worst Case	0.04	0.07	0.09	1.34	0.05	0.74

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Batch Annealing Furnaces - Natural Gas Combustion
Using SCC 1-03-006-03
nine (9) units rated at 6.0 MMBTU/Hr each

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
54.0	473.0

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	50.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.45	1.80	0.14	11.83	1.30	19.87

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Batch Annealing Furnaces - Propane Combustion
Less than 10 MMBTU per hour Units
nine (9) units rated at 6.0 MMBTU/Hr each

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content = 9.60 grains/100ft^3
54.0	5169.84	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.4	0.4	1.0 *(0.10S)*	14.0	0.5 **TOC value	1.9
Potential Emission in tons/yr	1.03	1.03	2.48	36.19	1.29	4.91

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.45	1.80	0.14	11.83	1.30	19.87
Heaters using Propane	1.03	1.03	2.48	36.19	1.29	4.91
Worst Case	1.03	1.80	2.48	36.19	1.30	19.87

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Package Boilers - Natural Gas Combustion
Using SCC 1-03-006-02
three (3) units rated at 33.48 MMBTU/Hr each

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
100.44	879.9

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	50.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.84	3.34	0.26	22.00	2.42	36.95

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPs not calculated since so low for natural gas combustion.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Package Boilers - Propane Combustion
Greater than 10 MMBTU per hour Units
three (3) rated at 33.48 MMBTU/Hr each

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur content =	grains/100ft^3
100.44	9615.90	9.60	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.6	0.6	1.0 *(0.10S)*	19.0	0.5 **TOC value	3.2
Potential Emission in tons/yr	2.88	2.88	4.62	91.35	2.40	15.39

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-03-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

The worst case for each pollutant was highlighted for easier identification. The emissions are summarized below.

	Pollutant					
All emissions in tons per year	PM*	PM10*	SO2	NOx	VOC	CO
Heaters using Natural Gas	0.84	3.34	0.26	22.00	2.42	36.95
Heaters using Propane	2.88	2.88	4.62	91.35	2.40	15.39
Worst Case	2.88	3.34	4.62	91.35	2.42	36.95

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Pickle Line HCl Emission Calculations
Pickle Line Capacity: 800,000 pounds of steel per hour
Controlled by a Wet Scrubber

13000 Fume Exhaust and wet scrubber System rating (acfm)
99.0% Scrubber Design Efficiency (HCl removal)
225.1 Scrubber Inlet HCl rate (lbs per hour) [provided by manufacturer]

986 Potential Scrubber Emissions Before Control (TPY HCl, part aerosol and HAP, assume PM=PM10)
Calculated as pounds per hour *8760 hours per year/2000 pounds per ton

9.86 Potential Scrubber Emissions After Control (TPY HCl, part aerosol and HAP, assume PM=PM10)
Calculated as before control * (1- fraction controlled)

Actual Test Results since the issuance of the MSOP in 1999:

Date of Testing	Outlet ppm HCl	Inlet loading lb/hour	Collection Efficiency
02/14/00	2.5	23	99.3
02/06/01	4.7	NA	95.0
02/20/02	4.8	7.83	96.6
03/06/03	7.1*	7.2	94.7*

* - This equipment is required by NESHAP to either emit less than 6 ppm HCl or at least 99% HCl collection.
The 3/6/03 test did not demonstrate compliance. A retest is already being scheduled.

According to the 3/6/03 test report, the 7.1 ppm concentration was equivalent to 0.38 pounds per hour HCl emissions.
0.38 pounds per hour is equivalent to (at 8,425 acfm):
1.66 tons per year (at 8,425 acfm); or
2.57 tons per year (at 13,000 acfm)

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Pickle Line Scale Breaker

Using pound per hour rates from form PI-26

17.25	pounds per hour particulate matter (and PM10) emission rate from scale breaker
75.56	tons per year potential emissions of PM and PM10 (Before Control)
99.50%	Estimated percent control efficiency of baghouse
0.38	tons per year emissions of PM and PM10 (After Control)

* - The emission rate was provided in the Part 70 application. It was derived from manufacturer information.

Using grain loading information from form CE-01

0.19	grain per acf from the scale breaker
10590	acfm gas flow through the baghouse (from the scale breaker)
75.54	tons per year emissions of PM and PM10 (Before Control)
99.50%	Estimated percent control efficiency of baghouse
0.38	tons per year emissions of PM and PM10 (After Control)

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
SSM 167-11837-00120
Reviewer: Rob Harmon
Date Received: January 25, 2000

Galvanizing Line Spray Cleaning Section
Galvanizing Line Capacity: 140,000 pounds of steel per hour
Controlled by a Mist Eliminator

8500	Fume Exhaust and Mist Eliminator rating (acfm)
99.0%	Mist Eliminator Design Efficiency (part. removal)
0.02	Mist Eliminator Outlet Concentration (grams per second) [Provided by manufacturer]
0.695	Potential Particulate Emissions After Control (TPY, assume PM=PM10 for this process) calculated as grams/sec * 0.002205 pound per gram * 60 sec/min * 60 min/hr * 8760 hr/yr / 2000 lbs/ton
69.5	Potential Particulate Emissions Before Control (TPY, assume PM=PM10 for this process) calculated as after control TPY / (1- control fraction)
03/03/00	Stack test performed on this emission unit resulted in:
0.0057	grain per dry standard cubic foot PM exhaust rate
0.11	pounds per hour PM, which is equivalent to:
0.4818	Potential Particulate Emissions After Control (TPY, assume PM=PM10 for this process)

The collection efficiency was not tested, therefore no determination can be made with regard to the estimated maximum inlet (before control) emission rates. The outlet rates (after control) seem to match up fairly well.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Zinc Induction Melting Section
Galvanizing Line Capacity: 140,000 pounds of steel per hour

10,200 Pounds per hour maximum zinc use
44676 Tons per year maximum zinc use (lbs per hour*8760 hours per year/2000 lbs per ton)

SCC #	Description	PM EF lbs/ton	PM10 EF lbs/ton
3-04-008-43	Electric Induction Melting (Stack)	0.1	0.1
Potential Emissions (Tons per Year):		2.2	2.2

Emission factors from AP-42 Section 12.14 (Tables 12.14-2 and 12.14-4)

SCC 3-04-008-70 is for fugitive emissions from electric induction melting. This emission rate is assumed (by AP-42) to be 5% of the stack emission rate. The 0.1 lbs per ton emission factor was derived by back calculation.

0.005 pounds per ton fugitive emission factor
5% how the fugitve factor was determined as a portion of the total emissions rate
0.1 pounds per ton total emission factor

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Galvanizing Line Chromate Spray
Galvanizing Line Capacity: 140,000 pounds of steel per hour

Purpose of the spray is to prevent discoloration and oxidation of the strip.
The spray is 3% to 5% chromic acid (Oakite Brand) solution.

Max. application rate is 1 mg per square foot
At 500 feet per min with a width of 74 inches, this is equal to 185000 mg per hour
or 185 grams per hour or 0.408 pounds per hour.

This is very close to the 0.37 pounds of chromic acid per hour they reported as their maximum use rate.

The emission estimates used are from the AK Steel construction permit. (CP147-6713-00041)
Their Galvanizing Line (including this section) is very similar to the one at CSN. There are 2 main differences. First, the unit at AK Steel is controlled by a scrubber, and this unit is not. Second, the AK Steel unit is larger. However, the systems should be close enough to use for this analysis.

0.161	Tons per year chromium compounds (after control) [at AK Steel]
183.6	tons per hour AK Steel max operating rate
70	tons per hour CSN, LLC max operating rate
0.95	assumed fraction controlled by AK Steel scrubber system
3.22	tons per year potential before control for AK Steel
1.228	tons per year potential for CSN, LLC (assuming linear correlation)

That emission rate would be for PM, PM10 and Chromium Compounds

Since this alternate emission factor was never verified, an initial and periodic stack test will be required.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Reversing Cold Mill
Reversing Cold Mill Capacity: 400,000 pounds of steel per hour
Controlled by a Progressive Purification System (Mist Eliminator)

130000	Fume Exhaust and Progressive Purification System rating (acfm)
99.0%	Progressive Purification Design Efficiency (Particulate and VOC)
0.01	Progressive Purification Outlet Part rate (grains per dscf) [provided by manufacturer]
48.81	Potential Progressive Purification System Part. Emissions After Control (TPY, assume PM=PM10) Calculated as scfm outlet air * grain/dscf * 60 min/hr *8760 hours per year/(2000 pounds per ton * 7000 grain/pound)
4881	Potential Progressive Purification System Part. Emissions Before Control (TPY, assume PM=PM10) Calculated as after control / (1- fraction controlled)
0.003	Progressive Purification Outlet VOC rate (grains per dscf) [provided by manufacturer]
14.64	Potential Progressive Purification System VOC Emissions After Control (TPY) Calculated as scfm outlet air * grain/dscf * 60 min/hr *8760 hours per year/(2000 pounds per ton * 7000 grain/pound)
1464	Potential Progressive Purification System VOC Emissions Before Control (TPY) Calculated as after control / (1- fraction controlled)

Initial stack testing took place on June 21 and 22, 2000. The results were:

0.91	pounds per hour particulate	3.9858	eq. tons per year (after control)
2.1	pounds per hour PM10	9.198	eq. tons per year (after control)
11	pounds per hour Total Hydocarbons (THC)	48.18	eq. tons per year (after control)

Additional testing on the specific compounds making up the THC value were performed on 2/7/01. This testing demonstrated that virtually all of the THC emissions from the cold mill are in the form of methane or ethane and therefore are not subject to consideration as a VOC.

The VOC emissions from this operation can be considered negligable.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Temper Mill

On March 31, 1998 Nucor Steel in Crawfordsville tested a similar piece of equipment. The results of this test will be used to estimate the potential emissions from CSN's Temper Mill.

0.218	Average PM and PM10 emission rate during the test (pounds per hour)
0.95	Assumed fraction removed by the mist elimination system on Nucor's process
2000	Pounds per ton (conversion factor)
8760	Hours per year (conversion factor)
4.36	Calculated pounds per hour before control (tested emission rate / (1-fraction controlled))
19.10	Calculated tons per year @8760 (for PM and PM10)
0.140	ratio of VOC emissions to PM emissions from the AK Steel construction permit (167-6713-00041)
2.68	Calculated tons per year @8760 (for VOC)

Assumptions:

Nucor Steel only tested the outlet emission rate, not the control efficiency. Therefore, a efficiency (95%) had to be assumed in order to back calculate before control emissions. This back calculation is necessary because CSN, LLC does not utilize the mist elimination system. Ninety five percent (95%) was chosen as a best case for this type of equipment based on prior experience with mist elimination systems. By choosing the maximum control efficiency, the resulting before control emission rate is maximized. This approach ensures any errors would result in over-estimation of emission rates.
The AK Steel ratio between PM and VOC is valid in this case (because the equipment is similar)
PM is assumed to be equal to PM10 for this operation (based on the Nucor test results)

Since this alternate emission factor was never verified, an initial and periodic stack test will be required.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Establish Entire Source PTE before Controls or Limitations
(Entire Source is not considered to be a listed source category, so it would be compared to a 250 tpy threshold)

	Pollutant							
	PM	PM10	SO2	NOx	VOC	CO	HCL	Chromium
Space Heaters	0.88	1.54	2.12	30.96	1.11	17.00		
Other Heating	0.06	0.10	0.14	2.01	0.07	0.53		
Generators	0.51	0.51	2.93	17.36	0.51	4.15		
GL strip dryer	0.04	0.07	0.09	1.34	0.05	0.74		
GL direct fire	1.30	1.51	2.08	41.20	1.09	16.67		
GL radiant heat	0.38	0.44	0.61	12.01	0.32	4.86		
GL chrom spray dryer	0.04	0.07	0.09	1.34	0.05	0.74		
BA line furnaces	1.03	1.80	2.48	36.19	1.30	19.87		
Package Boilers	2.88	3.34	4.62	91.35	2.42	36.95		
PL HCL Emissions	985.94	985.94					985.94	
Scale Breaker	75.56	75.56						
GL spray cleaning	69.54	69.54						
GL induction melting	2.23	2.23						
GL chromate spray	1.23	1.23						1.23
Reversing Cold Mill	4880.57	4880.57			0.00			
Temper Mill	19.10	19.10			2.68			
Total PTE (Bef Cont)	6041.28	6043.53	15.16	233.76	9.60	101.49	985.94	1.23

So, without any limitations this source would be major with regard to PSD for PM, PM10, VOC. However, CSN, LLC has already received some limitations from the previous permitting.

Establish Entire Source PTE after Required Controls and Limitations

	Pollutant							
	PM	PM10	SO2	NOx	VOC	CO	HCL	Chromium
Space Heaters	0.88	1.54	2.12	30.96	1.11	17.00		
Other Heating	0.06	0.10	0.14	2.01	0.07	0.53		
Generators	0.51	0.51	2.93	17.36	0.51	4.15		
GL strip dryer	0.04	0.07	0.09	1.34	0.05	0.74		
GL direct fire	1.30	1.51	2.08	41.20	1.09	16.67		
GL radiant heat	0.38	0.44	0.61	12.01	0.32	4.86		
GL chrom spray dryer	0.04	0.07	0.09	1.34	0.05	0.74		
BA line furnaces	1.03	1.80	2.48	36.19	1.30	19.87		
Package Boilers	2.88	3.34	4.62	91.35	2.42	36.95		
PL HCL Emissions*	2.57	2.57					2.57	
Scale Breaker*	0.38	0.38						
GL spray cleaning*	0.70	0.70						
GL induction melting	2.23	2.23						
GL chromate spray	1.23	1.23						1.23
Reversing Cold Mill*	48.81	48.81			0.00			
Temper Mill	19.10	19.10			2.68			
Total PTE (After Cont)	82.13	84.37	15.16	233.76	9.60	101.49	2.57	1.23

* - Indicates some form of limitation exists. Those limitations are: the Pickle Line Scrubber System must be in operation at all times; the Galv Line Spray Cleaning mist elim must be in operation at all times; the Reversing Cold Mill progressive purification system must be in operation at all times; and the Pickle Line Scale Breaker baghouse must be in operation at all times.

CSN, LLC
445 West Industrial Drive, Terre Haute, Indiana 47802
T 167-12516-00120
Reviewer: Rob Harmon
Date Received: July 19, 2000

Establish Nested Source PTE before Controls or Limitations
(Nested Source is considered to be a listed source category (Iron and Steel Mill Plants),
so it would be compared to a 100 tpy threshold)

In this case only those operations which have SIC Codes starting with 33 are included in the "Nested Source".

	Pollutant							
	PM	PM10	SO2	NOx	VOC	CO	HCL	Chromium
BA line furnaces	1.03	1.80	2.48	36.19	1.30	19.87		
Reversing Cold Mill	4880.57	4880.57			0.00			
Temper Mill	19.10	19.10			2.68			
Total PTE (Bef Cont)	4900.70	4901.47	2.48	36.19	3.98	19.87	0.00	0.00

So, without any limitations this source would be major with regard to PSD for PM, PM10, VOC. However, CSN, LLC has already received some limitations from the previous permitting.

Establish Entire Source PTE after Required Controls and Limitations

	Pollutant							
	PM	PM10	SO2	NOx	VOC	CO	HCL	Chromium
BA line furnaces	1.03	1.80	2.48	36.19	1.30	19.87		
Reversing Cold Mill*	48.81	48.81			0.00			
Temper Mill	19.10	19.10			2.68			
Total PTE (After Cont)	68.94	69.70	2.48	36.19	3.98	19.87	0.00	0.00

* - Indicates some form of limitation exists. This limitation is: the Reversing Cold Mill progressive purification system must be in operation at all times.

Clearly, both the entire source and the nested source would be considered to be a synthetic minor with regard to PSD.